



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0260; Project Identifier MCAI-2020-01255-T; Amendment 39-21745; AD 2021-20-07]

RIN 2120-AA64

Airworthiness Directives; Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.)
Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Canada Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. This AD was prompted by a report that following an in-service engine shutdown during taxi, water was found to be dripping into the forward avionics bay; the water caused a short circuit and tripped a circuit breaker. This AD requires replacing the forward galley slotted drain covers with solid blanking plates and modifying the associated drain tubing to block water. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus Canada Limited Partnership, 13100 Henri-Fabre Boulevard, Mirabel, Québec J7N 3C6, Canada; telephone 450-476-7676; email a220_crc@abc.airbus; internet <https://a220world.airbus.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0260.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0260; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued TCCA AD CF-2020-30R1, dated December 11, 2020 (TCCA AD CF-2020-30R1) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for certain Airbus Canada

Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. You may examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0260.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Canada Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. The NPRM published in the *Federal Register* on April 26, 2021 (86 FR 21969). The NPRM was prompted by a report that following an in-service engine shutdown during taxi, water was found to be dripping into the forward avionics bay; the water caused a short circuit and tripped a circuit breaker. The NPRM proposed to require replacing the forward galley slotted drain covers with solid blanking plates and modifying the associated drain tubing to block water. The FAA is issuing this AD to address water ingress into the forward avionics bay, which could short circuit the equipment in the bay area and lead to a loss of air data sources and consequent reduced functional capabilities and increase in crew workload, possibly leading to a loss of continued safe flight and landing. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the Proposed AD

Air Line Pilots Association, International (ALPA) stated that it supports the NPRM.

Request to Clarify Details of In-Service Event

Delta Air Lines requested that the FAA review the background information contained in TCCA AD CF-2020-30R1, and verify the details with Airbus Canada

Limited Partnership (Airbus Canada) to ensure the accuracy of the FAA AD. Delta Air Lines stated that it contacted Airbus Canada about the “in-service engine shutdown” phrase in the background statement, and found that there was no actual engine power loss in either event reported and that the flightcrew had reactively shut down the engine under normal procedures before returning to the gate. Delta Air Lines believes misleading information was communicated that caused TCCA to release the TCCA AD with incorrect information.

The FAA provides the following clarification of the event. The FAA contacted TCCA to discuss in detail the events leading up to the “in-service engine shutdown” before publishing the NPRM for public comment. In those discussions, it was determined and confirmed that while there was no actual engine power loss in either event, the flightcrew had shut down the engine for taxi back to the gate out of prudence after the CDC 4 AC 2 FEED 1 circuit breaker tripped. The FAA has not changed this AD in this regard.

Request to Specify Actions for Preventing Water Ingress

Delta Air Lines requested that the FAA consider providing interim guidance on how or what to inspect if water is discovered in the forward avionics bay. Delta Air Lines stated that it is concerned that Airbus Canada has not provided operators any guidance for addressing water found in the galley area. Delta Air Lines also stated that the Airbus Canada’s only guidance offered to operators are the recommendations in Airbus Canada Limited Partnership All Operator Message (AOM) CS-AOM-53-00-0002: “Make sure the drain lines are free of dirt and other obstructions so that fluids drain freely,” and “Where possible, avoid leaving Passenger and Service doors open during periods of heavy rain, and eliminate large accumulations of water or other fluids in the Forward Fuselage as expeditiously as possible.”

The FAA discussed this concern with TCCA and it was discovered that the Airbus Canada Limited Partnership Model BD-500-1A10/-1A11 Aircraft Maintenance Publication (AMP) contains an inspection for liquid spillage in the galley area of the aircraft. This special inspection, Airbus Canada Limited Partnership Data Module Code (DMC) BD500-A-J05-51-12-01AAA-284A-A, describes procedures for a general visual inspection in the galley area, and a supplemental detailed visual inspection if it is discovered that liquid has passed beyond the galley into other areas. The FAA suggests that operators consider using not only the guidance referenced by the commenter, Airbus Canada Limited Partnership AOM CS-AOM-53-00-0002, but also the procedure in the AMP, Airbus Canada Limited Partnership DMC BD500-A-J05-51-12-01AAA-284A-A, should excessive amounts of water be found in the galley. However, because this AD does not require an inspection for liquid spillage in or around the galley area, the FAA has not changed this AD in this regard.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR Part 51

Airbus Canada Limited Partnership has issued Service Bulletin BD500-530009, Issue 001, dated July 31, 2020. This service information describes procedures for replacing the forward galley slotted drain covers with solid blanking plates and

modifying the associated drain tubing to block water. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 39 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
1 work-hour X \$85 per hour = \$85	\$665	\$750	\$29,250

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-20-07 Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.): Amendment 39-21745; Docket No. FAA-2021-0260; Project Identifier MCAI-2020-01255-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus Canada Limited Partnership (type certificate previously held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) airplanes identified in paragraphs (c)(1) and (2) of this AD, certificated in any category.

(1) Model BD-500-1A10 airplanes, having serial number (S/N) 50001 through 50018 inclusive, and 50020 through 50055 inclusive.

(2) Model BD-500-1A11 airplanes, having S/N 55001 through 55016 inclusive, 55018 through 55068 inclusive, 55070 through 55083 inclusive, 55086 through 55088 inclusive, and 55090.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Reason

This AD was prompted by a report that following an in-service engine shutdown during taxi, water was found dripping into the forward avionics bay; the water caused a short circuit and tripped a circuit breaker. The FAA is issuing this AD to address water ingress into the forward avionics bay, which could short circuit the equipment in the bay area and lead to a loss of air data sources and consequent reduced functional capabilities and increase in crew workload, possibly leading to a loss of continued safe flight and landing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Replacement and Modification

Within 12 months after the effective date of this AD, replace the forward galley slotted drain covers with solid blanking plates and modify the associated drain tubing to

block water, in accordance with paragraph 2, "Procedure," of the Accomplishment Instructions of Airbus Canada Limited Partnership Service Bulletin BD500-530009, Issue 001, dated July 31, 2020.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Airbus Canada Limited Partnership's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2020-30R1, dated December 11, 2020, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0260.

(2) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; email 9-avs-nyaco-cos@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Airbus Canada Limited Partnership Service Bulletin BD500-530009, Issue 001, dated July 31, 2020.

(ii) [Reserved].

(3) For service information identified in this AD, contact Airbus Canada Limited Partnership, 13100 Henri-Fabre Boulevard, Mirabel, Québec J7N 3C6, Canada; telephone 450-476-7676; email a220_crc@abc.airbus; internet <https://a220world.airbus.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on September 15, 2021.

Ross Landes, Deputy Director for Regulatory Operations,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-22199 Filed: 10/12/2021 8:45 am; Publication Date: 10/13/2021]